

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
2. Authorization for this examiner's amendment was given in a telephone interview with Mr. Brian Decker on 02/17/2009.

3. The application has been amended as follows:

In claim 1, please replace the subject matter in the claim with the following:

1. A method, comprising: performing by one or more processors:
 - (a) receiving a digital image of a document associated with a document type, the digital image including a plurality of black and white pixels arranged in rows;
 - (b) locating at least two predefined portions of the digital image;
 - (c) calculating an area confidence level for each of the predefined portions of the digital image as a function of a total number of black pixels located in the predefined portion relative to an expected number of black pixels for the predefined portion;
 - (d) calculating a text confidence level as a function of a total number of pixel groups relative to a total number of characters, wherein each pixel group comprises a set of touching black pixels and each character comprises one or more pixel groups, wherein calculating the text confidence level comprises:
 - subtracting the total number of characters from the total number of pixel groups to produce a first quantity,

dividing the first quantity by the total number characters to produce a second quantity, and

subtracting the second quantity from 1 to produce the text confidence level, and if the text confidence level is negative, setting the text confidence level equal to 0;

(e) calculating an image profile confidence level as a function of a black pixel distribution and a black pixel density;

(f) calculating an overall image confidence level as a function of the area confidence level, the text confidence level, and the image profile confidence level; and

(g) storing the digital image as a result of determining that the overall image confidence level is greater than or equal to a threshold value associated with the document type of the image.

In claim 5, please replace the subject matter in the claim with the following:

The method of claim 1, wherein the digital image is a first digital image of the document received from scanning equipment, and further comprising, prior to performing step (g) performing by one or more processors:

determining that the overall image confidence level is less than the threshold value;

receiving a second digital image of the document;

replacing the first digital image with the second digital image, wherein the second digital image is treated as the digital image; and repeating steps (b) through (f).

In claim 18, please replace the subject matter in the claim with the following:

18. A method, comprising: performing by one or more processors:

determining that a first overall confidence level of a first digital image of a document associated with a document type is less than a threshold value associated with the document type;

receiving a second digital image of the document, the digital image including a plurality of black and white pixels arranged in rows;

locating at least two predefined portions of the second digital image;

calculating an area confidence level for each of the predefined portions of the second digital image as a function of a total number of black pixels located in the predefined portion relative to an expected number of black pixels for the predefined portion;

calculating a text confidence level as a function of a total number of pixel groups relative to a total number of characters, wherein each pixel group comprises a set of touching black pixels and each character comprises one or more pixel groups, wherein calculating the text confidence level comprises:

subtracting the total number of characters from the total number of pixel groups to produce a first quantity,

dividing the first quantity by the total number characters to produce a second quantity, and

subtracting the second quantity from 1 to produce the text confidence level, and

if the text confidence level is negative, setting the text confidence level equal to 0;

calculating an image profile confidence level as a function of a black pixel distribution and a black pixel density;

calculating a second overall image confidence level as a function of the area confidence level, the text confidence level, and the image profile confidence level; and

storing the second digital image as a result of determining that the second overall image confidence level is greater than or equal to the threshold value.

REASONS FOR ALLOWANCE

4. Claims 1-2, 5-7, 9-11, 18-19 and 22-26 allowed over the prior art of record.
5. The following is an examiner's statement of reasons for allowance: in addition to the teachings of the claims 1 and 18, as whole, closest art of record failed to teach or suggest among other thing,

"wherein calculating the text confidence level comprises: subtracting the total number of characters from the total number of pixel groups to produce a first quantity, dividing the first quantity by the total number characters to produce a second quantity, and subtracting the second quantity from 1 to produce a text confidence level, and if the text confidence level is negative, setting the text confidence level equal to 0."

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to AKLILU k. WOLDEMARIAM whose telephone number is (571)270-3247. The examiner can normally be reached on Monday-Thursday 6:30 a.m.-5:00 p.m EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samir Ahmed can be reached on 571-272-7413. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Samir Ahmed
Examiner
Art Unit 2624

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02/19/2009

/Samir A. Ahmed/
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